Hiroo Kanai*: Data format and retrieval items of my "List and index of literatures related to plant taxonomy and phytogeography of Japan"**

金井弘夫*: 日本植物分類学文献目録・索引のデータ仕様と検索項目**

One of the most important work in the study of plant taxonomy and phytogeography is to go through all available literatures which are expected to contain any item useful for one's study. Various kinds of bibliography and index are published inquiring Latin names, floras and other topics. But they are still insufficient if the user intend to retrieve much smaller topics such as local flora or vernacular name or items of other categories such as weed, palynology, chromosome or unusual phenomenon.

In the course of construction of KLIPS, a computer-aided mapping system, it became clear that a dot on the distribution map must be linked with corresponding literature to secure its reliability. Thus "List and index of literatures related to plant taxonomy and phytogeography of Japan" (Kanai 1985) and its volume 2 (Kanai 1987) were compiled to make easy the reference work and to establish a multipurpose detabase. Some 17,000 literatures, mostly Japanese, published in 1973 through 1985, though they are a part of contributions appeared in the period, are contained in these two volumes. They were compiled with the aid of Japanese language wordprocesser and computer of large dimension. Data input work is going on to enlarge the content as many as and as wide span of time as possible.

Items and their format Recording items of a literature are as shown in Tab. 1.

Author name (① and ②) is recorded in alphabetic and Japanese character. The family name is placed at the head. Co-authors are written in a series interposed by a slash. Name of journal or publisher (④ and ⑤) is recorded in full with omission of the head article. Title of literature (⑦ and ⑧) is recorded

^{*} Department of Botany, National Science Museum, 3-23-1, Hyakunin-cho, Shinjuku-ku, Tokyo 160. 国立科学博物館 植物研究部.

^{**} Contribution in honor of the late Dr. Hiroshi Hara.

Tab. 1. Headings of recording Item and their titles for a literature.

Heading	Title of Item (Character)
1	Author (Alphabetic)
2	Author (Japanese)
3	Year of publication (Numeric)
4	Journal or publisher (Alphabetic)
⑤	Journal or publisher (Japanese)
6	Volume (Number): Start page—End page (Numeric)
7	Title (Japanese)
8	Title (Alphabetic)
9	Name of plant group treated (Code & Alphabetic)
10	Place name refered (Code)
(11)	Miscellaneous topics (Code)
12	Biography (Alphabetic & Japanese)

Tab. 2. Codes and names of major plant groups recorded in item ⁽⁹⁾.

Code	Plant group
1 .	Angiosperms (Further classified by family)
2	Gymnosperms
3	Ferns
4	Mosses
5	Fungi
6	Algae
7	Lichens

in full. Items ① through ② are those for retrieval purpose. Name of plant group are classified to 7 major groups shown in Tab. 2. Family name is further described in case of the Angiosperms. An asterisk (*) is attached when the literature contains any kind of new name such as taxon nova, comb. nov., stat. nov., syn. nov. or new Japanese name. Place name is recorded by two Japanese characters representing prefecture in the Japanese territory and the continent in abroad. Actual place name is added after the code interposed by a colon(:). Miscellaneous topics (①) are classified by 19 categories shown in Tab. 3 and recorded by two Japanese characters. The name of person or group is men-

tioned in the item ② when the literature makes reference to it. The data recording is performed by OASYS100, a Japanese language wordprocesser.

List of literature The recorded data are processed by computer FACOM-M380Q and output into "List of literature" arranged in alphabetical order of the first author after giving some modification. Literature number is given to identify literatures in retrieval works. It is a number of three figures, representing the year of publication, suffixed by five figures, indicating serial number within the year of publication. An asterisk (*) is suffixed when the literature contains new plant name. A sharp (#) is suffixed when the literature is a summary or abstract of a literature or it is a bookreview. Literature code, consists of eight alphabetic and five Japanese-characters of the name of first author and literature number, is constituted to make the index uniformly.

Index of literature Index of literature covers all literature hitherto recorded in the 'List and index' though the 'List of literature' contains newly recorded ones. Data in the items ® through ® are extracted together with literature code after final proofreading. They are sorted to produce various kinds of index. Literature code is arranged in alphabetical order of the author in each index.

Taxonomic index is composed of seven major plant groups shown in Tab. 2. It is further classified by family in the Angiosperms and arranged in alphabetical order of family name. Regional index is classified by prefecture in Japanese

Tab. 3. Codes and titles of miscellaneous topics recorded in item 11.

Code	Topic		
奇異	Unusual phenomena	索引	Indexes and lists
帰化	Aliens and weeds	新名	New plant names
民俗	Vernacular names and ethics		(Covering various groups)
花粉	Palynology	図写	Figures and illustrations
染色	Chromosome	古生	Palaeontology
成分	Chemical ingradients	人歴	Biographies and histories
要旨	Summaries and reviews	施設	Institutions
分布	Distribution maps	利用	Gardening
植目	Floras	繁殖	Propagation
文目	Bibliographies	導入	Introduction of plant to Japan

Tab. 4. Headings of recording items and their title of new plant name index.

Heading	Title of Item
1	New plant name, Latin or Japanese
2	Status of the name (sp. nov., comb. nov. etc)
3	Literature code
4	Page
⑤	Relation of ① and ⑥ $(=, \rightarrow, \leftarrow, > \text{or } <)$
6	Plant name corresponding to ① (Basionym of ① or Latin name corresponding to Japanese name)
7	Status of ®

territory and by continent in abroad. It is further classified by smaller areas in circum-Japanese region. Place name is suffixed to literature code to give detailed information. Index to miscellaneous topics is classified into nineteen categories shown in Tab. 3. Personal or group names recorded in item ⁽²⁾ are arranged in alphabetical order to produce biographical index.

Words written in Japanese Katakana characters, which in most cases indicate plant name, are extracted from the item ⑦ and arranged in Japanese alphabetical order to retrieve plant name from the different standpoint.

New plant name index New plant names, Latin or Japanese, are extracted from literatures already recorded in the 'List and index' together with literature code and headings shown in Tab. 4. They are arranged in alphabetical order of epithets regardless of their rank. Relation between ① and ⑥ is simbolized as follows.

- =: The left member and the right member are equivalent such as Latin and Japanese names.
 - \rightarrow : The left member is the basionym of the right member.
 - ←: The right member is the basionym of the left member.
 - >: The right member is the synonym of the left member.
 - <: The left member is the synonym of the right member.

Thesaurus In order to translate code into correct spelling and produce proper arrangement of records, three thesauri are prepared. Family name thesaurus consists of Latin and Japanese name of Angiosperm families and their hierarchial number in some taxonomic systems. Regional name thesaurus consists of names of continent, country, district or prefecture and their numerical

hierarchy. Thesaurus of miscellaneous topics consists of full spelling corresponding to each topic code.

The author intends to produce an useful database of taxonomic botany and phytogeography. Accumulation of data, establishment of format and development of software are further required to make the 'List and index' more worthy.

References

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日本植物学文献目録・索引のデータ仕様と処理の概要をのべた。本書は目録について は新規に入力したデータ、索引についてはそれまでに入力したすべてのデータについて 電算処理を行い、リストを出力する方針であり、そのために便利なデータ仕様、処理法、 シソーラスを開発してゆくことを意図している。

○原 寛博士を語る* (北村四郎) Siro KITAMURA: My reminiscence on the late Dr. Hiroshi Hara*

「原 寛博士を偲ぶ」を追悼文集に執筆中, 植物研究雑誌の追悼記念号に書くように とのお手紙をもらった。原さんについては思いでがあふれて, 四百字詰五枚では書き切 れない。そこで二つの文を重複しないように, それぞれにまとめることにした。

原さんの学問上の業績は国際命名規約に基づいて、日本の植物の学名を正しくされた ことが大きい。その為には信ずるところに強く行動された。敬服する次第である。日常 はひかえめであるが、しんの強いところがあらわれた一つの場である。

戦後の植物分類学会で学名の発表形式について、学名は専門誌に正しく発表すべきであると申し合わされた。これは戦時中の研究の成果があっても、出版の機会がなかったので、適当でない出版物に機会を得て発表されたからである。戦前にも文部省の「天然記念物調査報告書」に新学名が発表され、裸名のこともあり、和文の記載のついたものもあった。これらは専門誌にラテン文をつけて正しく発表すべきであるとの見解である。裸名はもとより、和文の記載のついた学名も正式な発表と認めないとの見解である。牧野さんは新学名を英文で発表しているが、欧米のも古いところは英・独・仏・伊は従来

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